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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,471	06/03/2005	Udo Dwars	89954/JLT (58575-316787)	3253

43550 7590 04/06/2007

FAEGRE & BENSON
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2200 WELLS FARGO CENTER
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EXAMINER	
CHU, JOHN S Y	
ART UNIT	**PAPER NUMBER**
1752	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,471	DWARS ET AL.	
	Examiner	Art Unit	
	John S. Chu	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to the application filed June 3, 2005.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHIMADA et al (6,727,031) or SEKIYA (5,424,165)

The claimed invention is drawn to the following:

> 1. Process for the production of a negative working radiation-sensitive element comprising:
>
> (1) providing an optionally pretreated substrate,
> (2) applying a radiation-sensitive composition onto the substrate by means of a slot coater, wherein the radiation-sensitive composition comprises:
> (a) at least one negative working diazo resin,
> (b) at least one polymer with carboxyl groups soluble or swellable in an alkaline solution,
> (c) a solvent mixture comprising:
> (i) 2 to 9.9 wt.-% 1-methoxy-2-propanol,
> (ii) 20 to 50 wt.-% of at least one ketone with a boiling point below 130°C,
> (iii) 20 to 60 wt.-% of at least one alkanol with a boiling point below 120°C, and
> (iv) 10 to 30 wt.-% ethyl lactate;
> and
> (d) optionally one or more additives selected from stabilizing acids, colorants, plasticizers, surfactants, thickeners and exposure indicators;
> and
>
> (3) drying.

9. Radiation-sensitive composition comprising:
   (a) at least one negative working diazo resin,
   (b) at least one polymer with carboxyl groups soluble or swellable in an alkaline solution,
   (c) a solvent mixture comprising:
      (i) 2 to 9.9 wt.-% 1-methoxy-2-propanol,
      (ii) 20 to 50 wt.-% of at least one ketone with a boiling point below 130°C,
      (iii) 20 to 60 wt.-% of at least one alkanol with a boiling point below 120°C, and
      (iv) 10 to 30 wt.-% ethyl lactate;
      and
   (d) optionally one or more additives selected from stabilizing acids, colorants, plasticizers, surfactants, thickeners and exposure indicators.

Each of SHIMADA et al and SEKIYA disclose the claimed solvents for use in composition with a diazo resin, see column 19, lines 28-40 in SHIMADA et al and column 10, lines 46-65 in SEKIYA.

The references lack a working example wherein the solvent mixture of the four as claimed are used together, however the references clearly disclose the use of the solvents alone or in combination as seen below in SHIMADA et al :

> Examples of the solvent to be used here include, but are not limited to, ethylene dichloride, cyclohexanone, methyl ethyl ketone, methanol, ethanol, propanol, ethylene glycol monomethyl ether, 1-methoxy-2-propanol, 2-methoxyethyl acetate, 1-methoxy-2-propyl acetate, dimethoxyethane, methyl lactate, ethyl lactate, N,N-dimethylacetamide, N,N-dimethylformamide, tetramethylurea, N-methylpyrrolidone, dimethylsulfoxide, sulfolane, γ-butyrolactone, toluene and water. These solvents may be used singly or by mixing two or more. The concentration of the above components (total solid content including additives) is preferably 1 to 50% by weight.

and as seen in SEKIYA here below:

> **A light-sensitive layer of the foregoing composition can be formed by dissolving, in an appropriate solvent, the light-sensitive diazo resin, the polymer binder, the organic compound of the invention and optional various additives in predetermined amounts to give a coating solution of the composition, then applying the coating solution to a substrate and drying the coated layer. Examples of solvents used are methyl cellosolve, ethyl cellosolve, dimethoxyethane, diethylene glycol monomethyl ether, diethylene glycol-dimethyl ether, 1-methoxy-2-propanol, methyl cellosolve acetate, acetone, methyl ethyl ketone, methanol, dimethylformamide, dimethylacetamide, cyclohexanone, dioxane, tetrahydrofuran, methyl lactate, ethyl lactate, ethylene dichloride, dimethylsulfoxide and water. These solvents may be used alone, but preferred are mixtures of high boiling point solvents such as methyl cellosolve, 1-methoxy-2-propanol and methyl lactate with low boiling point solvents such as methyl ethyl ketone.**

It would have been prima facie obvious to one of ordinary skill in the art of photosensitive composition comprising diazo resins to use a combination any of the solvents as disclosed in SHIMADA et al or SEKIYA such as methyl propanol, methyl ethyl ketone, methanol and ethyl lactate and reasonably expect to have a composition which is excellent in coating a smooth layer, having a composition which is excellent in storage stability and print durability.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Cynthia Kelly, can be reached on (571) 272-1526

The fax phone number for the USPTO is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John S. Chu
Primary Examiner, Group 1700

J.Chu
April 1, 2007